

## REMARKS

### (I) Summary of the Office Action

Claims 41-53, 96-108, and 152-164 were pending in this application.

Claims 41, 42, 44, 48, 50, 96, 97, 99, 101-103, 105, 152, 153, 155, 159, and 161 were finally rejected as being unpatentable over Schein et al. U.S. Patent No. 6,002,394 ("Schein") in view of Lawler et al. U.S. Patent No. 5,699,107 ("Lawler") and Watts et al. U.S. Patent No. 6,324,694 ("Watts"). Claims 46, 52, 101, 107, 157, and 163 were finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Schein in view of Lawler, Watts, and Woo U.S. Patent No. 5,485,219 ("Woo"). Claims 47, 53, 102, 108, 158, and 164 were finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Schein in view of Watts, Lawler, and Block et al. U.S. Patent No. 5,699,107 ("Block"). Finally, claims 43, 45, 49, 51, 98, 100, 104, 106, 154, 156, 160, and 162 were objected to as being dependent upon a rejected base claims but are indicated as being otherwise allowable.

### (II) Summary of Applicants' Reply

Applicants note with appreciation the indication of allowable subject matter in claims 43, 45, 49, 51, 98, 100, 104, 106, 154, 156, 160, and 162, and hereby expressly reserve the right to rewrite any one or more of those claims in independent form if its respective base claim is not ultimately allowed.

Applicants have amended claims 41, 96, and 152 to more particularly define the subject matter of the claimed invention. These amendments are fully supported by the specification as originally filed. No new matter has been added.

The Examiner's rejections and objection to the claims are respectfully traversed.

### (III) Examiner's "Response to Arguments" Is Not Fully Responsive

As a preliminary matter, applicants respectfully submit that the Examiner's Response to Applicants' arguments filed October 3, 2006 in reply to the June 6, 2006 Office Action ("June Office Action") is not fully responsive. According to the MPEP, "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." MPEP § 707.07(f). The Examiner failed to satisfy this requirement.

In particular, in the June Office Action, Schein and Watts were applied in a rejection of the independent claims under 35 U.S.C. § 103. Applicants provided a complete response on October 3, 2006, addressing the basis of that rejection and pointing out specific errors in the reasoning on which the rejection was based. Specifically, applicants addressed the failure of Schein and Watts to show a unique identifier that is distributed in a continuous data stream only when the particular program to which it is associated is currently being broadcasted. In addition, in order to advance allowance of the application, applicants amended the claims to include performing an action associated with at least one other program belonging to a same program grouping as the particular program.

In the present Office Action, the Examiner added Lawler for its alleged teachings regarding features added by applicants' amendment but repeated the substance of the June Office Action. The Action, however, failed to address applicants' arguments, stating merely that "[a]pplicant's arguments filed 10/3/2006 have been fully considered but they are not persuasive." See Office Action, page 2. The Examiner then proceeds to address applicants' amendments, which, as stated above, were made simply to advance prosecution, while failing to answer the substance of applicants' arguments.

Therefore, in order to expedite prosecution of this application, and in accordance with MPEP § 707.07(f), applicants respectfully request that the Examiner address the substance of applicants' arguments provided below if any rejection to which this Reply is directed is repeated in the next Office Action.

#### (IV) The Claims Rejections

Claims 41, 42, 44, 48, 50, 96, 97, 99, 103, 105, 152, 153, 155, 159, and 161 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Schein in view of Lawler and Watts. Claims 46, 52, 101, 107, 157, and 163 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Schein in view of Lawler, Watts, and Woo. Claims 47, 53, 102, 108, 158, and 164 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Schein in view of Watts, Lawler, and Block. Applicants respectfully traverse these rejections.

##### A. Summary of the Claimed Invention

Applicants' independent claims 41, 96, and 152 are directed toward systems and a method for providing program guide data to an interactive television program guide implemented

on user television equipment. The program guide data includes unique identifiers associated with television programs. A particular unique identifier associated with a particular television program is selected for inclusion in a continuous data stream, where the particular television program belongs to a program grouping. The particular unique identifier is distributed to the user television equipment in the continuous data stream only when the particular television program is currently being broadcasted. The interactive television program guide implemented on the user television equipment monitors the continuous data stream for the presence of the particular unique identifier, which indicates when the particular television program is currently being broadcasted. When the particular unique identifier is detected in the continuous data stream, the interactive television program guide performs a real-time action associated with the particular television program, and also performs an action associated with at least one other television program belonging to the program grouping.

Applicants' claimed invention is an improvement over traditional techniques that rely on start times included in program schedules to determine when to perform an action, such as scheduled program recording, on an interactive program guide system. By relying on a unique identifier that is detected in a continuous data stream only when the program is currently being broadcasted to perform these actions, the claimed invention advantageously enables the interactive television program guide system to accommodate last-minute television program scheduling changes (e.g., due to program overruns or cancellations) that can affect a real-time program guide action, such as the display of a program reminder or the beginning of a program recording. *See, e.g., Applicants' specification, page 38 to page 39.*

B. The References Relied Upon

Schein describes providing interactive television schedule information to viewers. In some embodiments, Schein describes an electronic program guide (EPG) that, among other things, distributes blocks of EPG data for current or future programming on a carousel. A viewer wishing to access program guide information for a future time block may experience a specified amount of delay before receiving said block. *See, e.g., Schein, column 12, lines 27-60.*

Lawler describes displaying a reminder to a user shortly before a selected program begins. A user sets a reminder by selecting a program using an interactive viewing system that "offers at least a time-based program guide." *See Lawler, column 3, lines 36-43.* Once a reminder for a particular program is set, the system monitors the reminder and, shortly before the program is

available, informs the user that the program is about to begin. The reminder is displayed five minutes before the program begins, and may reappear five seconds before the program begins if the user closes the first reminder. See Lawler, column 12, lines 35-63.

Watts describes synchronizing subsidiary data with primary content data transmitted separately from the subsidiary data. For example, subsidiary data may include additional biographical information regarding actors in a program. See Watts, column 4, lines 23-33. As discussed in Watts in connection with FIG. 1, each piece of a portion of subsidiary data includes a particular "tag value." See Watts, column 7, lines 30-33. The primary content also includes a tag value or identifier identifying its corresponding piece of subsidiary data. See Watts, column 7, lines 33-36. A portion of subsidiary data corresponding to a particular program can be received in advance of the program and stored locally for future use. See Watts, column 4, lines 42-49. Upon receiving primary content data, synchronization logic 141 compares tag values included in the primary content data to tag values included in the subsidiary data to identify and synchronize the identified piece of subsidiary data to the program of primary content data. See Watts, column 7, lines 39-42.

C. Schein, Watts, and Lawler, Taken Individually or in Combination  
Fail to Teach or Suggest All Features of the Claimed Invention

The Office Action contends that a combination of Schein, Lawler, and Watts renders all of Applicants' claimed features recited in independent claims 41, 96, and 152 obvious under 35 U.S.C. § 103. See Office Action, pages 3-7. Applicants disagree.

1. Watts Does Not Describe a Unique Identifier That Is Distributed Only  
When a Corresponding Program Is Currently Being Broadcasted

The Action admits that "Schein and Lawler are silent about receiving a unique identifier only when the particular television program is currently being broadcasted and the particular unique identifier indicating when the particular television program is being currently broadcasted," and applies Watts to make up this deficiency. See Office Action, page 5, lines 19-22. This combination fails to render the claims obvious.

Although Watts describes transmitting a tag value with each piece of primary content data, the tag value is not transmitted only when the primary content data is being broadcast. In particular, as stated above, each portion of subsidiary data corresponding to a piece of the primary data in Watts is transmitted with a tag value that matches the tag value associated with the

piece of primary content data. The tag value and the subsidiary data can be transmitted before, during, or after the primary content data (which also includes the same tag values). Therefore, if the tag values are transmitted when the subsidiary data is transmitted, and also when the primary content data is transmitted, and the primary data and subsidiary data can be transmitted at different times, then the tag values (included in both non-simultaneous transmissions) cannot be transmitted only when the primary content data is being currently broadcasted, as alleged by the Action.

Furthermore, synchronization logic 141 of Watts uses the tag values described above to identify a particular piece of subsidiary data corresponding to the portion of the program currently being displayed. See Watts, column 7, lines 16-28. If the program and its corresponding subsidiary data were transmitted simultaneously in lock-step, the system of Watts would not require tag values to synchronize the program to its subsidiary data -- it could simply receive and display them in unison. It is precisely because each piece of subsidiary data can be transmitted before, during, or after its corresponding program portion that the tag values and synchronization logic 141 are required. Because subsidiary data and primary content data both include matching tag values, and the subsidiary data can be transmitted independently of the primary content data at times that may not coincide with the broadcast of the corresponding program (see, e.g., Watts, column 4, lines 42-49), these tag values are not distributed only when the program is currently being broadcasted.

Therefore, contrary to the Action's assertion, Watts fails to describe a unique identifier that is distributed in a continuous data stream only when a particular program associated with the unique identifier is currently being broadcasted, as is explicitly recited in claims 41, 96, and 152. Block and Woo, which are applied for their alleged teachings regarding features in the dependent claims, also fail to make up for this deficiency. Moreover, no basis outside of Applicants' disclosure is provided in the Action that would lead one of ordinary skill in the art to bridge this deficiency in the cited references.

Applicants therefore respectfully request reconsideration and withdrawal of the rejection of independent claims 41, 96, and 152 for at least the foregoing reasons. Claims 42, 44, 46-48, 50, 52, 53, 97, 99, 101-103, 105, 107, 108, 153, 155, 157-159, 163, and 164, which depend from claims 41, 96, and 152, are also rejected under § 103 on the same erroneous basis. Applicants therefore respectfully request reconsideration and withdrawal of the rejection of these claims for the same reasons.

2. The Combination of Schein, Lawler, and Watts Fails to Describe Monitoring a Continuous Data Stream for a Particular Unique Identifier that is Distributed Only When a particular Television Program is Currently Being Broadcasted

Moreover, Schein, Lawler, and Watts, taken individually or in combination, fail to describe monitoring a continuous data stream for the presence of the particular unique identifier, wherein the presence of the particular unique identifier indicates when a particular program associated with the unique identifier is currently being broadcasted. However, the Action asserts that Schein and Watts each describes monitoring a continuous data stream for the presence of a particular unique identifier. See Office Action, page 4, last paragraph, and page 6, second paragraph. Applicants respectfully disagree.

(i) Schein Fails to Describe Monitoring a Continuous Data Stream for a Particular Unique Identifier that is Distributed Only When a Particular Television Program is Currently Being Broadcasted

The Action asserts that Schein describes monitoring a continuous data stream for the presence of a particular unique identifier in column 12, lines 47-60. Applicants respectfully submit that the cited section fails to support the Action's assertion. In particular, this portion of Schein describes delays that may be experienced by a viewer wishing to access program scheduling information for a future time block. The cited section, however, does not describe that the viewer or the program guide system monitors the carousel for a particular unique identifier. However, despite this lack of support, the Action asserts that Schein discloses this subject matter because "if a viewer wishes to access a future program guide block, then the viewer must monitor the channel that will have the transmitted future program guide block (with the various unique identifiers)." Office Action, page 4, last paragraph, emphasis added. Applicants respectfully disagree.

First, persons skilled in the art will recognize that program guide data that is displayed for future time blocks may be available to the viewer days, weeks, or even months before the corresponding program is actually broadcast to the viewer, and therefore is not distributed only when the corresponding program is currently being broadcasted. For example, in Schein, the program guide may include a schedule information area that depicts the programs that are being presented on each channel at each time during the day, week, or month. See Schein, column 2, lines 33-44. Furthermore, "a future program guide block," by definition, corresponds to programs that are not currently being broadcasted. Therefore, even if a future program guide block includes "various unique identifiers" that may be visible to a viewer of the monitoring a channel, these

identifiers will correspond to programs that are not currently being broadcasted. This is in direct contrast with monitoring a continuous data stream for unique identifiers that are present only if the program is currently being broadcasted, as specified in the independent claims. Therefore, the Action's assertion that any of these identifiers correspond to Applicants' particular unique identifier distributed only when a corresponding program is currently being broadcasted is unfounded.

Furthermore, the Action fails to point out the specific element(s) of program guide data in Schein that allegedly correspond to Applicants' particular unique identifier, and which can therefore be "monitored" by a viewer wishing to access program guide information for a future time block. Applicants' ability to adequately address the propriety of the Action's assertion is hampered by this lack of specificity. According to 37 C.F.R. 1.104(c)(2), "[w]hen a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable." Applicants believe Schein is an example of such a complex reference for at least the reason that it includes disclosure related to inventions other than that claimed by applicants. Therefore, in accordance with 37 CFR 1.104(c)(2), applicants respectfully request that the Examiner point out the specific parts of Schein that allegedly show the unique identifiers in the next Office communication that contains this rejection.

As best construed, the Action appears to imply that "unique identifiers, such as title or start time" of a program included in program guide data in Schein correspond to Applicants' particular unique identifier. See, e.g., Office Action, page 2, lines 16-18, and page 5, last paragraph. Applicants respectfully disagree. As recited in Applicants' claims, the presence of a particular unique identifier indicates that a particular program associated with the unique identifier is currently being broadcasted. Therefore, the Action is implying that in the alleged combination of Schein and Watts, the program guide information distributed on the carousel in Schein must be modified to exclude both start time and title information for all programs, except ones that are currently being broadcasted. However, such a modification would render the EPG system of Schein inoperable for at least some of its intended purposes, including allowing a user to set a reminder or a recording for future programs (see, e.g., Schein, column 15, lines 58-66), and hence the combination of Schein and Watts is improper as a matter of law (see MPEP § 2143.01(V)).

For at least the foregoing reasons, Schein fails to describe monitoring a continuous data stream for a particular unique identifier whose presence indicates that a particular program is currently being broadcasted.

(ii) It Would Not be Obvious to Modify the Continuous Data Stream in Schein to Include Tag Values Described in Watts

In addition, Watts fails to make up for this deficiency in Schein for various reasons. First, Applicants have already established in Section VI-C(1) above that Watts fails to describe a particular unique identifier that is distributed only when a program with which the identifier is associated is currently being broadcasted. Watts also fails to describe monitoring a continuous data stream for such an identifier. In fact, Watts does not even describe that either primary content data or subsidiary data including tag values are distributed in a continuous data stream. To make up for this deficiency, the Action asserts:

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the continuous data stream transmitted to the viewer, as taught by Schein and Lawler, to include the unique identifiers, as taught by Watts, for the purpose of providing subsidiary data (such as a pop-up window or PIP) synchronous to primary data (the television program).

(Office Action, page 6, second paragraph.) Applicants respectfully disagree. In particular, the carousel or endless loop in Schein is used to provide program schedule information or program guide data for current or future programs (*see, e.g.*, Schein, column 12, lines 27-60). In contrast, the primary content and subsidiary data of Watts correspond to actual program content, not program schedule information for programs. Watts also specifically states that the tag values are included in each piece of primary content data and subsidiary data in order to allow the pieces of data to be synchronized for display (*see, e.g.*, Watts, column 7, lines 29-44). Therefore, the alleged motivation provided by the Action for modifying Schein and Lawler, *i.e.*, "to provide subsidiary data synchronous to primary content data," serves, at best, to motivate one of ordinary skill in the art to modify program content data in Schein and Lawler to include the tag values of Watts, not the program schedule information transmitted on the carousel in Schein as suggested by the Action.

Therefore, the Action's assertion that it would be obvious to modify the continuous data stream in Schein to include unique identifiers taught in Watts is unfounded.

(iii) Amendments to Claims 41, 96, and 152 Provide Further Patentably Distinguishing Features from Schein, Lawler, and Watts

Moreover, applicants have amended each of independent claims 41, 96, and 152 to recite that the action associated with at least one other program belonging to the program grouping is performed in response to detecting the unique identifier in the continuous data stream. Schein,



Watts, and Lawler, taken individually or in combination, fail to teach or suggest this feature. In the Action, the Examiner contends that "Lawler discloses a reminder option that can be used to set reminders for a show that is part of a weekly, [and] therefore teach[es] performing an action that is associated with at least one other television program belonging to the program grouping." Office Action, page 5, lines 10-13. However, even assuming, *arguendo*, that this alleged teaching in Lawler describes performing an action related to at least one other program in a program grouping, the cited references, taken individually or in combination, fail to teach or suggest performing this action when a particular unique identifier distributed only when a particular program is currently being broadcasted is detected in a continuous data stream.

Applicants therefore respectfully request reconsideration and withdrawal of the rejections under § 103 of independent claims 41, 96, and 152, and dependent claims 42, 44, 46-48, 50, 52, 53, 97, 99, 101-103, 105, 107, 108, 153, 155, 157-159, 163, and 164 for at least the foregoing reasons.

(V) Conclusion

For at least the reasons discussed above, applicants submit that this application is in condition for allowance. Prompt consideration and allowance are therefore respectfully requested.

We believe that we have appropriately provided for fees due in connection with this submission. However, if there are any other fees due in connection with the filing of this Response, please charge our Deposit Account No. 06-1075 under Order No. UV-110 from which the undersigned is authorized to draw.

Dated: September 21, 2007

Respectfully submitted,

By Regina Sam  
Regina Sam

Limited Recognition No.: L0381  
ROPES & GRAY LLP  
1211 Avenue of the Americas  
New York, New York 10036  
(212) 596-9000  
(212) 596-9090 (Fax)  
Attorneys/Agents For Applicant